K-12 Educator Professional Development (Non-Content Specific)

Program description:

Professional development for K-12 teachers includes activities such as workshops, conferences, summer institutes, and time set aside during the school year for general staff development. In this analysis, we estimate the impact of providing one additional day of professional development time.

Typical age of primary program participant: 10

Typical age of secondary program participant: N/A

Meta-Analysis of Program Effects

Outcomes Measured	Primary or Secondary Participant	No. of Effect Sizes	Unadjusted Effect Sizes (Random Effects Model)			Adjusted Effect Sizes and Standard Errors Used in the Benefit-Cost Analysis					
						First time ES is estimated			Second time ES is estimated		
			ES	SE	p-value	ES	SE	Age	ES	SE	Age
Test scores	P	4	0.00*	0.00	0.99	0.00	0.00	11	0.00	0.00	17

**actual ES = -.00001 before rounding*

Benefit-Cost Summary

The estimates shown are present value, life cycle benefits and costs. All dollars are expressed in the base year chosen for this analysis (2011). The economic discount rates and other relevant parameters are described in Technical Appendix 2.

Program Benefits					Costs	Summary Statistics			
Participants	Taxpayers	Other	Other Indirect	Total Benefits		Benefit to Cost Ratio	Return on Investment	Benefits Minus Costs	Probability of a positive net present value
-$1	$0	$0	$0	-$1	-$6	-$0.11	n/e	-$7	48%

Detailed Monetary Benefit Estimates

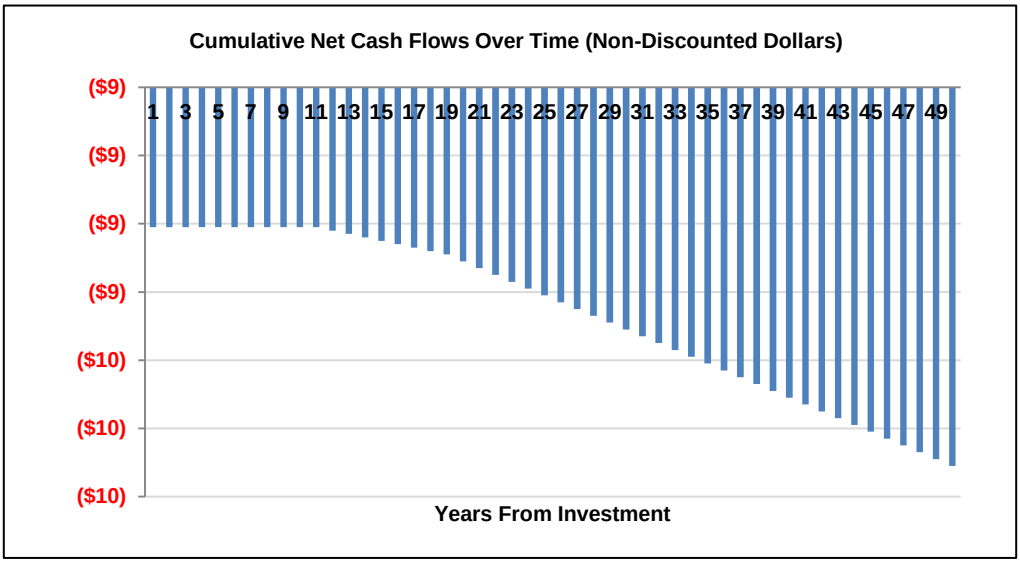
Source of Benefits	Benefits to: Participants	Taxpayers	Other	Other Indirect	Total Benefits
From Primary Participant					
Earnings via test scores	-$1	$0	$0	$0	-$1

Detailed Cost Estimates

The figures shown are estimates of the costs to implement programs in Washington. The comparison group costs reflect either no treatment or treatment as usual, depending on how effect sizes were calculated in the meta-analysis. The uncertainty range is used in Monte Carlo risk analysis, described in Technical Appendix 2.

Program Costs			Comparison Costs			Summary Statistics	
Annual Cost	Program Duration	Year Dollars	Annual Cost	Program Duration	Year Dollars	Present Value of Net Program Costs (in 2011 dollars)	Uncertainty (+ or – %)
$59	1	2010	$53	1	2010	$6	20%

Source: We assumed that school districts provide 10 days' worth, on average, of professional development time spread out over the school year (similar to Washington State allocations for learning improvement days). We calculated the value of professional development time using average teacher salaries (including benefits) in Washington State. To calculate a per-student annual cost, we assume that each teacher has an average of three classrooms with an average of 25 students per classroom. The increase in treatment group costs relative to the comparison group represents one additional day of professional development time.



Multiplicative Adjustments Applied to the Meta-Analysis

Type of Adjustment	Multiplier
1- Less well-implemented comparison group or observational study, with some covariates.	0.5
2- Well-implemented comparison group design, often with many statistical controls.	0.5
3- Well-done observational study with many statistical controls (e.g., IV, regression discontinuity).	0.75
4- Random assignment, with some RA implementation issues.	0.75
5- Well-done random assignment study.	1.00
Program developer = researcher	0.5
Unusual (not “real world”) setting	0.5
Weak measurement used	0.5

Studies Used in the Meta-Analysis

Harris, D. N., & Sass, T. R. (2011). Teacher training, teacher quality and student achievement. *Journal of Public Economics, 95*(7-8), 798-812.

Jacob, B. A., & Lefgren, L. (2004). Remedial education and student achievement: A regression-discontinuity analysis. *The Review of Economics and Statistics, 86*(1), 226-244.